**(Note that operational definitions are applied also to the independent variables; for example, the method section of an experimental paper includes a description of the stimuli and the conditions of its presentation.)**

**There are no UMs for motivation or training -- the independent variables -- which appear in the learning function and which are designed to explain behavior.**

**In light of the brief review presented, one may reach a number of conclusions. First, reasonable solutions have already been offered for most of the methodological problems in psychology. Second, in many cases, the natural sciences are troubled by similar problems as those in psychology. Therefore, one might suggest that psychology should be considered a science like the natural sciences; however, I believe this claim is incorrect.**

**For example, given that the length of the stick (S) is 3 meters (S=3 meters), we can state that the relation between the length of S and its unit of measurement (meter) is 3 (S/meter = 3).**

**On this topic, Michell (1999) wrote: “… there has been little serious scientific research undertaken to show that the relevant attributes are really quantitative and, therefore, that the relevant attributes are measurable” (p. 187). In other words, psychologists have bypassed or ignored the need to empirically show that the psychological property to which numbers are being applied is indeed a quantifiable property that can be characterized by an additive structure.**

**The JND is a theoretical concept, which is expressed in several ways.**

**The current paper proposes that the failure to develop a unified theory is a major factor that differentiates psychology from physics. One possible explanation for this failure is UMs-equivalency, which helps bridge the theory-observation gap in physics but not in psychology. Alternative explanations such as reductionism and consciousness, as well as models that generate interval scales, were additionally examined; however, they were found to be poor explanations. Hence, UMs-equivalency appears to be the best answer to the question surrouding the developmental gap between these two fields. Furthermore, it appears that UMs-equivalency constitutes the basis for a solution to Wigner’s problem: the amazing success of mathematics in describing and explaining nature.**